

**Amendments to the Specification:**

Please replace the paragraph beginning at page 1, line 21, and ending at page 2, line 6, with the following amended paragraph:

When they purchase [[bland]] brand new equipment (machine) and check it, enterprises perform the checking by making [[it]] sure that the equipment (machine) operates according to its specification because at present there is no checking standards or unified rules. However, since recent automatic devices (machinery) have a combined system structure in which a lot of devices are connected via interface cables, there might be no matching between these systems, thus causing a lot of troubles later, or even fire accidents.

Please replace the paragraph beginning at page 3, line 3, and ending at page 3, line 12, with the following amended paragraph:

Methods of diagnosing abnormalities and deterioration for electric motors include: (1) vibration methods; (2) acoustic methods; (3) temperature methods; (4) torque methods; (5) current methods; and (6) waveform methods. Of these methods, vibration methods, which are the most frequently used methods, will be described as follows. The other diagnosing methods are omitted patents filed by the inventor[[s]] of the present invention (Japanese Patent Applications No. 2000-386603, No. 2001-265949, No. 2001-358718, and No. 2003-030807).

Please replace the paragraph beginning at page 7, line 7, and ending at page 7, line 13, with the following amended paragraph:

In order to diagnose deterioration for electric motors and inverters, the inventor[[s]] of the present invention filed Japanese Patent Applications No. 2000-386603, No. 2001-265949 and

No. 2001-358718 as new methods of determining the degrees of deterioration of electric motors and [[inventers]] inverters and its cause and location by the size of a relative harmonic content in the current.